



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,651	08/22/2003	Gregory L. Zwadlo	58575-278105	9942

7590 04/19/2005  
Robert Leonard  
Faegre & Benson LLP  
2200 Wells Fargo Center  
90 South Seventh Street  
Minneapolis, MN 55402-3901

EXAMINER

PHAM, HAI CHI

ART UNIT PAPER NUMBER

2861

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/646,651

Applicant(s)

ZWADLO ET AL.

Examiner

Hai C. Pham

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/15/03 &amp; 3/21/05</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 11 and 16 are objected to because of the following informalities:

#### Claim 11:

- Line 2, add a *coma* after “substrate”.

#### Claim 16:

- Line 4, add a *period* after “layer”.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Each of the claims 8 through 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for being incomplete. Claims 8-10 are claiming “an image transfer system”, wherein only the colorant transfer medium is being claimed and where the most critical components for performing the image transfer are missing (e.g., print head, radiation source, ...).

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 3, 5-6, 8-9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Baldock (GB 2083726).

Baldock, an acknowledged prior art, discloses an image transfer system comprising a colorant transfer medium (donor sheet) having a substrate (support sheet 1) a colorant layer (dye layer 3) formed on the substrate and a radiation absorbing material, which can be provided as a separate layer (carbon-containing resin layer 2) underneath the colorant layer or admixed with the dye (page 2, lines 27-30). Baldock

Art Unit: 2861

further teaches a recipient (receptor sheet consisting of a support sheet 4 and a dye receptive coating 5) facing the dye layer (3) of the donor sheet for receiving the dye transferred from the donor sheet under the radiation of a laser beam (6) such that the transfer of the dye is done away from the donor support sheet (1) (page 4, lines 25-47).

6. Claims 1, 3, 5-6 and 16 rejected under 35 U.S.C. 102(e) as being anticipated by Warner et al. (U.S. 6,461,787).

Warner et al. discloses a transfer imaging elements comprising a substrate having a surface colorant layer containing a pigment and an IR absorber, wherein the IR absorber is located either in the colorant layer or in a separate layer between the substrate and the colorant layer (col. 18, lines 22-40).

7. Claims 1, 3-9, 11-12 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Coveleskie et al. (Pub No. U.S. 2004/0063010).

Coveleskie et al. discloses a process for adjusting the focus and the energy of an imaging laser for imagewise transferring a colorant from a donor sheet (10, Figs. 1 and 2) onto a receiver sheet (20, Figs. 2 and 3), the donor sheet comprising a substrate (base element 11), a radiation absorbing layer (heating layer 13) and a colorant-containing layer (14) disposed in that order, using an imaging laser for emitting a laser beam at a wavelength within a first wavelength and a second wavelength (within the range of 750 nm and 870 nm) (paragraph [0112]), wherein the radiation absorbing layer absorbing a focus radiation beam at a predetermined level and at a third wavelength

Art Unit: 2861

(e.g., 670 nm) that is not between the first and the second wavelength (e.g., 750 nm and 870 nm, respectively), and wherein the reflected beam of the second radiation from the donor is detected by a detector (50, Fig. 5) such that the print head is moved as a function of the return signal (the focus position of the imaging laser is adjusted based on the return signal), and wherein the sensed reflected radiation is a function of the thickness of the substrate and the colorant (paragraph [0107]).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warner et al.

Warner et al. further suggests that the IR absorber layer may be placed in any suitable position within the transfer imaging elements beside the location between the substrate and the colorant layer (col. 2, lines 19-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to coat the IR absorber layer on the surface of the substrate opposite to the colorant layer as claimed, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

Art Unit: 2861

10. Claims 10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coveleskie et al. in view of Warner et al.

Coveleskie et al. discloses all the basic limitations of the claimed invention except for the radiation absorbing layer being located on the opposite side from the colorant layer or being included in the colorant layer.

Warner et al. discloses a transfer imaging element comprising a substrate having a surface colorant layer containing a pigment and an IR absorber, wherein the IR absorber is located either in the colorant layer or in a separate layer between the substrate and the colorant layer.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a donor sheet having the radiation absorber included within the colorant layer as taught by Warner et al. in the device of Coveleskie et al. since Warner et al. teaches this to be well known in the art to either provide the radiation absorber as a separate layer or intimately admixed to the colorant layer, whose ultimate performance would not be different.

Moreover, since Warner et al. further suggests that the IR absorber layer may be placed in any suitable position within the transfer imaging elements beside the location between the substrate and the colorant layer (col. 2, lines 19-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to coat the IR absorber layer on the surface of the substrate opposite to the colorant layer as claimed, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coveleskie et al. in view of Harrigan et al. (U.S. 5,212,500).

Coveleskie et al. discloses all the basic limitations of the claimed invention except for the positionable lens for focusing the first radiation.

Harrigan et al. discloses an image forming apparatus comprising an imaging laser diode array (60) for exposing a donor sheet for image transferring onto a receiver sheet and a focus laser diode (62) for producing a laser beam of different wavelength toward the donor sheet and a photodetector (130) for detecting the reflected light of the focus laser diode to output a signal based on which the position of the imaging lens is adjusted for properly focusing the imaging laser diode array onto the donor sheet (col. 13, lines 16-46).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Coveleskie et al. to adjust the position of the lens as taught by Harrigan et al. The motivation for doing so would have been to have only a single and less bulky element to adjust the focus of the imaging laser beam.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.



Art Unit: 2861

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM  
PRIMARY EXAMINER

April 16, 2005